AMENDMENTS

I.   IN THE CLAIMS

1.   (cancelled)

2.   (cancelled)

3.   (currently amended)   A method for determining a tunnel endpoint in a communications system, the method comprising the steps of:

receiving a connection request from a client;

responsive to the connection request, querying a database for a database entry matching the client using predetermined identifying information, where the matching database entry will include an identifier for a tunnel endpoint;

responsive to receiving a database reply including the identifier for the tunnel endpoint, establishing a connection for the client to the tunnel endpoint identified in the database reply; and

responsive to not receiving a database reply:

establishing a connection for the client to a locally determined tunnel endpoint, and

updating the database to include a database entry that includes the predetermined identifying information for the client and an identifier for the locally determined tunnel endpoint.

where the step of querying a database for a database entry matching the client includes querying a local database for the matching entry and, if none is found, querying a remote database, and

[The method of claim 2,] where the step of querying a remote database further includes multicasting a message having a predetermined message identifier and the predetermined identifying information for the client.

4. (original) The method of claim 3, where:

the step of multicasting a message having a predetermined message identifier further includes multicasting the message having the predetermined message identifier a predetermined number of times in the absence of a database reply; and

the step, responsive to not receiving a database reply, of establishing a connection for the client to a locally determined endpoint further includes waiting a predetermined time-out period after a last multicast of the predetermined number of times for multicasting before establishing the connection for the client to the locally determined endpoint.

5. (original) The method of claim 4, where the step of updating the database to include a database entry that includes the predetermined identifying information for the client and an identifier for the locally determined endpoint further comprises multicasting a message having another predetermined message identifier and including the predetermined identifying information for the client and the identifier for the locally determined endpoint.

6. (original) The method of claim 5, where the predetermined identifying information includes an EDO and a Username for the client.

7. (original) The method of claim 6, where the identifier for the endpoint is a network address.

8. (cancelled)

9. (cancelled)

10. (cancelled)

11. (cancelled)

12. (amended) A network communication system, the system comprising:

a database device configured to store a data entry, where the data entry is keyed by predetermined client identifying information and includes a tunnel endpoint identifier field, the database device being further configured to receive a database query that includes a client identifying information value, search for a matching data entry that matches the client identifying information value and, if the matching data entry is found, send a database reply that includes the value of the tunnel endpoint identifier field of the matching data entry;

an initiator network device for receiving a call request from a client and, responsive thereto, generate a database query having the client identifying information value for the client from which the call request is received, and where the initiator network device is further configured, when a database reply corresponding to the database query for the calling client is received, to establish a connection to an tunnel network device corresponding to the endpoint identifier value included in the database reply and, when no database reply corresponding to the database query for the calling client is received, the network device is configured to locally select a locally determined endpoint value and establish a connection for the client to a network device corresponding to the locally determined endpoint value

The network communication system of claim 10, where the network device is further configured to generate the database query having the client identifying information value for the client from which the call request is received by sending a multicast message having a predetermined message type and the client identifying information value for the client from which the call request is received and where the database device is configured to search for the

matching database entry responsive to receiving the multicast message having the predetermined message type.

13. (original) The network communication system of claim 12, where the network device is further configured to determine that no database reply has been received by sending the multicast message having the predetermined message type a predetermined number of times without receiving the database reply within a predetermined time period.

14. (original) The network communication system of claim 11, where:

the network device is further configured to generate the database update by sending a multicast message having a predetermined message type along with the client identifying information value for the client from which the call request is received and the locally determined endpoint value; and

the database device is configured to create the database entry having the client identifying information value for the client from which the call request is received and the locally determined endpoint value responsive to receiving the multicast message having the predetermined message type.

15. (cancelled)

16. (cancelled)

17. (cancelled)

18. (amended) A network system for transmitting and receiving packets across a network, the network device comprising:

a database device coupled to the network and configured to receive a first predetermined type of message having a client identifier field and, responsive thereto, search for a database entry having a key field with a value matching a value of the client identifier field,

where the database entry includes a tunnel endpoint address field and, when a corresponding database entry is found, generate a second predetermined type of message having the client identifier field that includes the value of the key field of the database entry and a tunnel endpoint field that includes a value of the tunnel endpoint address field of the database entry, and where the database device is configured to receive a third predetermined type of message having the client identifier field and the tunnel endpoint field and, responsive thereto, store a database entry corresponding to a value in the client identifier field of the third predetermined type of message and having a value of the tunnel endpoint field of the third predetermined type of message in the endpoint address field of the database entry;

a first network device coupled to the network and configured to receive a first call request from a client device and, responsive thereto, locally select a second network device coupled to the network and establish a first connection for the client device from the first network device to the second network device, where the first network device is also configured to generate the third predetermined type of message having a value corresponding to the client device in the client identifier field and an address value corresponding to the second network device in the tunnel endpoint field; and

a third network device coupled to the network and configured to receive a second call request from the client device and, responsive thereto, generate the first predetermined type of message having the value corresponding to the client device in the client identifier field, and where the third network device is also configured to wait for a predetermined time period to receive the second predetermined type of message having a value of the client identifier field corresponding to the client device and, using the value of the tunnel endpoint field of the second predetermined type of message, establish a second connection to the second network device

~~The network system of claim 17,~~ where the first predetermined type of message is a database query message, the second predetermined type of message is a database reply message, and the third predetermined type of message is a database update message.

19. (cancelled)